Human Capital Optimization: A study on Effect of Internal training and Digital Learning on Employability development of employees

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Abstract
The entry of online technology in the information era has witnessed a radical effect on the knowledge acquisition of an individual to sustain in the competitive scenario. The professional of the digital age is expected to acquire ICT (Information and Communication Technology) skills to survive in the virtual world to be successful in their career. The advent of digital tools and networking facility had set up an electronic platform for a graduate to improve their employability skills.The introduction of Digital Technology boosted the process and core skills of an individual with high self-confidence, a process skill attribute or subset of the employability skills to achieve success in the Job-market. This paper is an analysis of the significance of Learning with Digital Technologyto enhance the employability potential of business trainees as digital competence are expected for better employment prospects. The study had analyzed the variation of the process skills of employees with the impact of the digital technology facilities implemented in institutions and had also identified the instance of high variation in the process skills of those trainees are not given exposure to Digital Technology facilities.
KEY WORDS: *Process Skill, Employability, ICT, Learning with Digital Technology,*

I.   INTRODUCTION

Transition from traditional modes of learning to the modern means of virtual learning had taken place in India at a higher pace, though the educational institutions follow the technological advancements in a snail's pace. The e-learning revolution with the e-commerce entry and its impact on the employability of business management trainees is an interesting study in the modern competitive business world. There is an utter need for the business management trainees to upgrade their skills due to the mismatch of skills with the changing business scenario in the modern context. The modern business management adopted global standards of benchmarking at all functional levels and expect the young trainees to be equipped with the technological skills to match the competitive business world. This study is intended to find the impact of Learning with Digital Technology on the employability skills of employees.

Employees should possess digital skills with exposure to ICT (Information Communication Technology) and Digital Technology as these are vital skills considered by the employer to absorb management trainees for a job. Not all the institutions provide the infrastructure facilities from academic scenario with the digital infrastructure, but certain advanced institutions with an additional investment had initiated it. This will surely enhance the employability potential of employees, as they get exposure with activities such as interactive webinars, conferencing both audio and videos, access to expertise sessions through the internet, CEO talk, web blogs which discuss about a specific topic with inputs from various segments of industry in different streams and access to solved research-based articles in referred journals through e-learning digital library.

Scope of the study

The advent of the digital communication technology in the academic field had marked a significant impact in the higher education. The new generation is more inclined to get information from the web-based learning and the accessibility to the internet had radically changed the learning methodology of the trainees [1][2]. The advantage of e-learning will benefit the trainees if the proper alignment of the technology is done with pedagogy combined with teacher's efficiency in imparting it [3]. There are several ways the Digital Technology has been improving the efficiency of the education system, there is promising evidence that an individual's employability skills are also enhanced with the knowledge of ICT. It is a fact that continuous

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upgrading of skills for employability is a mandate for any job as per the dynamic conditions of the industry. Digital skills helps the young graduates to adapt with new business environments equipped with advance technologies.

II. REVIEW OF LITERATURE

Horton (2005) defined e-learning as the application of internet and digital technologies to create experiences that educate human resource. E-learning has the potential to revolutionize the way we instruct to learn and how we learn (Marc, Rosenberg ,2001). Learning with Digital Technology entails a blend of technology, digital content, and training. Digital Technology is defined as any process in which the teacher or learner uses digital equipment such as a computer (or a smart phone, tablet, MP3 player, or console) to access digital tools such as learning platforms and virtual learning environments (VLEs), and/or Learning with Digital Technology resources (such as lessons, tests, learning aids and games) to improve their knowledge and skills. The learning hub in e-learning consists of digital class, wi-fi enabled campus, e-books access free or paid through online library, usage of ICT in the learning process. The digital tools if used efficiently, it will build skills such as interactivity, critical thinking, collaboration among the trainees and initiate e-commerce link to the learning process.

BENEFITS OF LEARNING WITH DIGITAL TECHNOLOGY

The Learning with Digital Technology comprises of the audio, video learning with interactive CD's, email, tele-conferencing etc. EDUSAT is the first exclusive satellite configured to meet the growing demand for an interactive satellite-based distance education system for India. Many other live transmission programs have been set up with the support of Government initiatives for the benefit of the learners. The UGC (University Grants Commission of India) had set up Media Centers in various universities and institutions in the country with to produce video & multimedia-based programmes and in-house quality educational programmes for electronic media. The Expert can address the queries of the trainees in the live mode with methods such as Audio Video Conferencing and through the satellite-based distance education system which enables virtual classrooms at rural and remote locations across the country. The start of Cloud based E-learning solutions have enabled to use the web-based tools at a reasonable cost and the Open educational resources (OER ICT) supports trainees to access the subject based contents in the virtual learning world. There are lots of group who contributes widely to open source and open content which plays a critical role in e-learning in the future. Hence, there should be appropriate benchmark to monitor, and the e-learning courses and the industry should be ready to accept the e-learning certification to smoothen the placement process of the learners.

There is similarly some qualitative evidence that digital tools and resources enable teachers to do their job better in relation to teaching, assessment and their own on-the-job learning and development. This helps the trainees to have more accuracy in the evaluation and feedback system which gives scope for further improvement in their academic performance. The usage of Digital Technology will aid trainers to improve their pedagogical approaches and their assessment of learning of the trainees [4]. There are many employees who had enrolled for certification course [5] to improve their employability potential as they are aware of the tough job market to land into an employment. Among these, business management studies through online are highly accepted with the launch of MOOC (massive open online course) from Harvard to a Private partnered course which was widely accepted globally. Thus, the trainees and trainees can benefit from experts located in various Educational Institutions across the globe. The empirical studies [6] had identified the efficiency of educational outcomes that varies across the countries with the kind of infrastructure facilities involved which has great potential to increase the efficiency in ICT for improving the educational outcomes. Most of the organizations adopted Learning with Digital Technology technologies for improving the employability of the trainees with exposure to case studies of reputed industry bodies and institutes, with incorporating business cases of different segments and sectors improves the knowledge of the trainees. The trainees get access to research based articles through e-library with e-database of journals such as EBSCO, repositories of universities, Ernet hosted journals, ProQuest etc.

Advantages over Traditional Classroom learning

The Digital Technology had opened ways for the teachers and the trainees to communicate at ease to evaluate their assignments and employees to modify their work prompt it as per the remarks of the teachers which leads to the progress of the student's knowledge in the specific discipline. There is another breakthrough in the Digital Technology introduction in the institution as teachers can notify their ward's performance to their parents and get their attention as more efficient as the response can be quick compared to the older system of progress report which can improve learners' and parents' cooperation with requests from teachers about attendance, behaviour and support for learning. Trainers should be competent to work in virtual learning environments to facilitate communication with trainees as well as the other stake holders of education. [9]

The exposure of trainees to digital class learning has already proven successful in the school education with the multi-media facility which enables visual based learning of different subjects. Successful utilization of Digital Technology depends not just upon sufficient access to equipment, tools, and resources, but also on the availability of sufficient training, and knowledge and support networks for teachers. If the support is given to the instructors and convince them the benefits of e-learning, then it provides strong evidence that use of digital technologies can aid learning and teaching, as well as enhance the ability of trainees to learn effectively (Wheeler, 2001).

There are various factors to be identified for efficient implementation of Digital Technology learning and teaching. Training and technical support for instructors will help them to overcome the initial apprehension about the ICT and its initial lagging of the skills. They should be trained in the use of different learner- centered pedagogies and should be given opportunities for networking with faculty of other institutions. Instructor's support to access digital equipment is vital for any learner or else the very purpose of Learning with Digital Technology fails to achieve it. Most of the Y-gen trainees of all streams are technology savvy who depends more on the internet technologies for updating knowledge. Access to digital knowledge platforms helps the trainees to be updated with latest information.

METAMORPHOSIS INTO EMPLOYMENT WITH DIGITAL COMPETENCE

The employers of the competitive world expect digital competence along with other personal competencies which is related to social skills of networking to connect to the outer world through networking. The effective use of digital technologies combined with experiential learning practice is crucial for an institution to link with industry to update with the progress in the business where the experiential learning is crucial (Steven Gold, 2001) This emphasizes on training especially in the on-job trainings with livestock trading, online HR recruitment, interactive sessions with industry experts in webinars, and such. The experts from each industry sector address trainees through online seminar which will enable the trainees to get the solutions instantly. These are web-based training with Digital Technology communication. As the subject experts deliver lectures live with satellite technology, trainees can clarify their doubts promptly is an efficient way of learning. The employee feedback about the online learning states that courses delivered online in a part-time MBA program is positive and it enables to develop the knowledge creation skills with the availability of course material through the internet [10]

Youssef et.al (2008) [11], studied about the influence of the usage of ICT on the student's outcome in the higher education and focused on the direct and indirect effects. Many of the institutions opt for the usage of ICT as it has positive correlation with the student outcome which demonstrates in improving their motivation, self-esteem, ICT skills, collaborative skills, subject knowledge, information handling skills, metacognitive skills etc. The institutions with Digital Technology facilities assist trainees with access to lecture contents, articles and case studies of reputed journals and to high quality e-text books and e-journals from the database of central repositories Portals. The academic factors of employability from the institutional perspective includes the infrastructure facilities an institution offers which are mainly digital library, computer lab with management relevant software, conference sessions with digital satellite technology, webinars, and video conferencing from companies etc. As some of the University repositories have the database of collection of research journals, which will strengthen the knowledge of any individual, are all the sources of enhancing the graduate's employability skills.

Each institution and the faculty make use of the digital resources in different manners, and it enhance the knowledge to help trainees to be aware of the latest developments . There are many ways in which a graduate who depends on online learning to gather information could improve skills. The use of digital technology in trainings and classes improve the digital skills and employability of students . (Kr H. M. Raboca et.al (2004) had analyzed the student's perceptions on the impact of ICT in the educational attainment with various merits & de-merits observed to it. The benefits are the performance improvement with the ICT tools and the de-merits are the lack of training both in the teachers and trainees in the use of ICT tools. The skills should be helping student to analyze the business scenario from different angles of digital marketing, stock trading, forex trading, and online investments, Outsourcing of HR functions such as online recruitment, CRM – customer relationship management, online market surveys etc. This kind of experiential learning has a strong impact on improving the employability of business management trainees who studies in institutions supplemented with online based training. The participation of trainees voluntarily in blogs of their specialization can open way for the interchange of ideas to learn more about their subject which is also an interesting window for discussion in the world-wide web. The collaboration with international universities also helps to exchange ideas beyond cross-cultural zone. The entire process of the educational e-learning system requires a shift of change management with incorporating Student Information System, Collaborate Social Networking Sites, Professional LinkedIn, EPGDM Program, and the implementation of a strong infrastructure for smooth process of the online education.

The post CoVID environment had opened for a blended learning in training, and education as well. The study is relevant as there is widening of skill gap due to ineffective strategies of the implementation of technology in the academic field.

PROCESS SKILLS AND EMPLOYABILITY

Table 1

PROCESS SKILLS	
Digital Technology / Computer Literacy	Problem solving
Commercial Awareness	Negotiating
Prioritising	Decision Making
Subject Application / Domain Knowledge	Teamwork
Time Management	Accountability

Skills used to manage and modify actions in the completing of daily living tasks, such as pacing onesel f, choosingand using appropriate tools to complete a task, or organizing a task into a logical sequence for succes sful completion. The process skill (Saunders V &Zuzel K, 2010) is implied with the application of tools to complete or organize a task into a logical sequence for successful completing any task with the right application of skills in the right context. The respondents use digital technology in learning new things independently.

Objectives of this study

- Analyse the impact of Learning with Digital Technology on the employability skills of business management trainees.
- Examine the variation in the skill level of process skills in the institutions where it is implemented.

Population and Sample size

The sample data of the study are employees from different sectors and their skill level is evaluated using a self-assessment instrument and compared with the skill level expected from the employers of selected sectors of industry. The facility of digital technology in the academic institutions is taken as the selection variable with its impact on the dependent variable of process skill average and the process skills of trainees which is the independent variable. The predicted value derived with the analysis of multiple linear regression is compared with the mean value and based on that the variation of the skills set is derived.

The process skill variation in the employability is modelled using the regression equation

Process skill Predicted value $= \beta_0 + \sum \beta_1 * \ln$ (mean of process skill)

were the mean is given in the descriptive statistics.

REGRESSION CO-EFFICIENT AND PREDICTED VALUES OF PROCESS SKILL OF TRAINEES OF INSTIUTIONS IN TAMILNADU IN TWO DISTICT CASES-LEARNING WITH, AND WITHOUT DIGITAL TECHNOLOGY

PROCESS SKILL VARIATON OF TRAINEES: SERVICE SECTOR						
Learning with Digital Technology	Predicted process skill level			R^2 of model	F value	Significance
	Mean	σ	Predicted level			
YES	6.04	1.29	4.88	.258	3.44	.000
NO	5.82	1.35	5.09	.260	11.92	.000

Table 2. Predicted value of the skill variation

The above table indicates there is less (predicted variation in process skill is 4.88) variation in the process skills among trainees towards the end of the course as they have been trained with Digital Technology facility in the institution. The predicted variation in process skills of 5.09 is higher in institutions without ICT facilities than that of with ICT facilities, this indicates that the employability skill of trainees from institutions with ICT facilities have high average (6.04) and low F Value (3.44). But mean of process skill of trainees from institutions without ICT skills is 5.82 and F value is 11.92. This shows lower ICT skills and large variation in employability level due to the variation in ICT skills.

These are the outcomes of attributes of the linear regression of the student's process skills with the selection variable as Digital Technology.' The 't' value is less than '2', and significant level >.05 except in ICT, prioritizing, Subject Application, Time Management, and Problem Solving. This means that only these three skills contributed to the variation in process skill, while all other skills are to an extent is same. So, majority of

the trainees are equipped with ICT skills and hence it can be found that there is an impact on the employability skills with the Learning with Digital Technology facility.

REGRESSION CO-EFFICIENT AND PREDICTED VALUE OF PROCESS SKILL OF TRAINEES OF INSTIUTIONS IN KARNATAKA LEARNING WITH AND WITHOUT DIGITAL TECHNOLOGY

PROCESS SKILL VARIATON OF TRAINEES – MANUFACTURING						
Learning with Digital Technology	Predicted process skill level			R^2 of model	F value	Significance
	Mean	σ	Predicted level			
YES	5.54	1.47	4.27	.459	13.05	.000
NO	5.76	1.44	4.49	.265	9.82	.000

Table 3. Predicted value of the skill variation

The above table shows the predicted variation in the process skill among the trainees with Digital Technology facility as 4.27, which is less than the predicted variation (4.49) without Digital facility. The regression model for the process skill for with Digital Technology facility explained 45.9% variance and only 26.5% for the process skills of trainees from institutes without Digital Technology facility. This is contrast to the results of Service Industry as the trainees in Karnataka institutions, especially trainees from urban areas get acquainted with Digital technologies their own without depending on academic institutions. Hence, even if there are no Digital Technology facilities in their institutions, their employability level is high. It is evident from the F values as well. F value of ICT skills is higher for the trainees from the institutions having Digital Technology facilities. This questions the effectiveness of using ICT facilities for enhancing employability skills

REGRESSION CO-EFFICIENT AND PREDICTED VALUE OF PROCESS SKILL OF TRAINEES OF INSTIUTIONS UNDER PGDM CATEGORY OF BOTH SERVICE AND MANUFACTURING SECTORS WITH AND WITHOUT DIGITAL TECHNOLOGY

PROCESS SKILL VARIATON OF TRAINEES - PGDM						
Learning with Digital Technology	Predicted process skill level			R^2 of model	F value	Significance
	Mean	σ	Predicted level			
YES	6.48	1.26	3.65	.328	4.83	.000
NO	5.95	1.26	4.60	.516	10.44	.000

Table 4. Predicted value of the skill variation

The above table shows the predicted variation in the process skill as 4.60 for institutions without digital technology facility and it is higher than the predicted variation in process skills (3.65) with digital technology facility. The process skills such as Subject application, Problem solving, Negotiating and accountability have 't' value greater than '2' in the case of trainees of PGDM institutes with digital technology facility and skills such as Decision making, Teamwork and Accountability have 't' value greater than '2' in the case of trainees of other sectors with digital technology facility. The variation in employability level (F= 10.44) in institutions without Digital facilities is higher. It resembles the results of SERVICE SECTOR

III. RESULTS AND DISCUSSIONS

The study had identified the impact of digital technology on the employability of trainees in business institutions; and found out that digital technology support contributes to specific skill level attainments with improvement in the learning capacity of the trainees and improved the efficiency of the academic system. The study also identifies the variation of different process skills of trainees with respect to the availability of the ICT/digital technology facilities surrounding them. There is a significant effect in the variation in the level of process skills of the trainees from the institutes without digital technology facilities. This has substantial difference in the achievement of professional skills which will increase the employability of the trainees. The lower variation in the Predicted value score of certain skills of trainees in the institutes with the Learning with Digital Technology indicates that the student's process skills are improved with this background. Hence, the study concludes that there is variation in process skills of trainees of institutes where there is exposure to these updated learning environments with ICT and Learning with Digital Technology. The study also indicates there is improvement in the employment with the transition in the instruction methodology and pedagogy which is

incorporated in the business management institutes in the form of digital competence to be attained along with other competencies.

IV.   LIMITATIONS AND CHALLENGES

There is contradictory outcome in some societies despite the considerable growth in the use of information and communication technologies (ICT) as there is an indication that HE (Higher Education) fails to attain the expected transition in learning and teaching. The implementation of the Learning with Digital Technology is a costly affair with the initial huge investment to initiate the process and the know-how and expertise to execute and train the trainees. The carrying out of the Learning with Digital Technology requires the upgradation and maintenance of digital tools and it involves operational costs as well cost for the functioning of digital equipment and tools.The limitation in the online world is that broad band connection often getting slower, and the challenge lies in the continuous availability of network connection. As many reports states that a reasonable proportion of trainees who enrolled for the various online courses had discontinued it which proves that human factor absence in the virtual learning is a major drawback for its final success. There are lots of evidence that the overall technology-based interferences in a student's learning will make a difference only when it is utilized properly to support teaching and learning. Though the e-learning process link the scholar to the world of experts all over the world but still, recommends for a blended or Hybrid learning as more reliable learning in the future.

V.   Conclusions

In general, it can be summarized that the usage of digital tools for learning and student's accessibility to wi-fi have its impact on the improvement of the process skills which reflects on the employability of the trainees. Hence, the Government should focus to initiate strategic policies for Learning with Digital Technology and teaching by providing evidence the benefits of Learning with Digital Technology and teaching in the academic institutions. As the corporate world demands trainees sharpened with ICT skills on hiring the entry level trainees, the challenge ahead is to overcome the roadblocks of the institutions to emerge a blended learning system in the virtual platform comprising both traditional and Learning with Digital Technology.

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